

MACROECONOMIC POLICIES, GROWTH AND POVERTY REDUCTION IN KYRGYZ REPUBLIC

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I. INTRODUCTION

Kyrgyz Republic, with a per capita income of US\$ 270 (Purchasing Power Parity \$ 2,540) in 2000, is among the poorest quintile of nations in terms of per capita income and the second poorest country in Central Asia. It is the most agricultural and the least industrial of the former Soviet Central Asian Republics. Around the turn of the century, agriculture accounted for 39 per cent of GDP and 52 per cent of the labour force. Two-thirds of the population lives in rural areas.¹

Compared to the last years of Soviet rule (around 1990) per capita income at the turn of the twenty-first century was only 60 per cent. During Soviet rule, the incidence of absolute poverty was low by the standard of the low-income countries. By the turn of the century the incidence of absolute poverty had grown high. There was widespread popular perception of increased incidence of poverty and growing inequality.²

The change between the end of Soviet rule and the turn of the century was not monotonic. This period can be divided into two distinct sub-periods. From 1990 to 1995 was half a decade of sharp reduction in output and income throughout the economy coinciding with a rapid rise in inequality in the distribution of income. Since 1996 the economy has been on a path of recovery, led by the agricultural sector. This recovery has neither been particularly robust nor very steady: growth was concentrated in a limited number of sectors, notably agriculture, gold mining and energy; and it was weak in 1998 and 1999. And yet there is convincing evidence that during much of the period of

1 Information in this paragraph is from World Bank, 2002.

2 World Bank, 1998 gives a graphic account of this perception.

recovery the incidence of absolute poverty declined. The critical element in this outcome was the avoidance of increased inequality in the distribution of income during the process of recovery.

As stated above, despite the recovery since 1996, Kyrgyz Republic is desperately poor at the beginning of the twenty-first century, with only 60 per cent of the per capita income and a vastly higher incidence of absolute poverty as compared to the year 1990. To attain anything like the millennial target of poverty reduction, the process since 1996 must be accelerated. By raising the average growth rate of 5.5 per cent obtained over the last six years to something close to 7 per cent and by avoiding an increase in the inequality of the distribution of income, Kyrgyz Republic should be able to bring down the incidence of poverty very substantially.

The purpose of this report is to explore the feasibility of such a growth path. This is done by first trying to understand the broad features of the decline and the recovery that has characterized the last decade (Section II). Next, the performance of the major sectors of the economy in the period of recovery and the constraints faced by them are analyzed (Section III). Employment is a critical link between economic growth and poverty reduction. It is the conduit through which the benefits of economic growth are passed on to the poor for whom labour is the principal, often the only, available resource. Section IV constructs the employment scenario that has accompanied economic recovery since 1996. Section V attempts an understanding of inequality-averting and poverty-alleviating characteristics of the growth process since 1996 or thereabout. Section VI pulls together the findings of the preceding sections to identify the elements of a strategy of poverty-reducing growth for Kyrgyz Republic in the coming decade and beyond.

II. MACROECONOMIC PERFORMANCE: DECLINE AND RECOVERY IN THE POST-INDEPENDENCE PERIOD

The magnitude of decline and the extent of recovery

Table 1 summarizes the basic facts about the macroeconomic performance of the economy and its major sectors following independence. Independence was followed by a sharp decline in GDP and its component sectors for half a decade. Since 1996 economic recovery began to take place. But growth has by and large been limited to agriculture, gold mining and energy. By 2001 agricultural output had significantly exceeded the previous peak and was 17 per cent above the level in 1990. Industrial output had declined by 70 per cent between 1990 and 2001. There was a large increase in the output of gold, and a better than average performance of the energy sector over the same period, which hides the true magnitude of de-industrialization: manufacturing output declined by 78 per cent over the same period. Manufacturing value added fell from 26 per cent of GDP in 1990 to 6 per cent in 2000. Services sector also declined though at less catastrophic a rate than industries. By 2001 real value added in services had fallen by more than two-fifths since 1990.

Table 1: Decline and Recovery during 1990-2001

| | -----Annual Growth Rates (Per cent) ----- | | | | | | | | | 2001 Value as Per Cent of 1990 Value |
|------------------|---|-----------|-----------|------|------|------|------|-------|------|---|
| | 1990-95 | 1995-2001 | 1990-2001 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | |
| GDP | -12.7 | 5.5 | -3.2 | 7.1 | 9.9 | 2.1 | 3.7 | 5.0 | 5.3 | 67.9 |
| Agriculture VA | -6.0 | 8.1 | 1.4 | 15.2 | 12.3 | 2.9 | 8.2 | 3.9 | 6.4 | 116.9 |
| Industrial VA | | | -9.1 | -2.6 | 19.6 | -3.9 | -4.3 | 6.0 | 5.4 | 35.0 |
| Manufacturing VA | | | -13.0 | -4.7 | 0.9 | -6.0 | -5.8 | -19.3 | 0.9 | 21.6 |
| Services VA | | | -4.7 | | | | | | | 58.9 |
| Population | | | 1.30 | | 1.57 | 1.28 | 0.83 | 0.79 | | 115.3 |
| Per Capita GDP | | | -4.7 | | 0.5 | 2.4 | 4.1 | 4.5 | | 58.9 |

Note: These data should be regarded as approximate indicators rather than precise estimates. Source: For 1990-2000: World Bank, 2002; for 2001: Economist Intelligence Unit Country Reports. Growth rates are annual compound rates of change between end points of the periods shown. Blank spaces indicate absence of data on a comparable basis. Some data are from the National Statistical Committee (NSC).

GDP as a whole was nearly a third lower in 2001 than in 1900. The rate of population growth declined substantially after independence and available estimates of annual growth have fluctuated sharply from one year to another due to uneven rates of migration. Once population growth is factored in, Kyrgyz Republic shows a more than 40 per cent decline in per capita GDP between 1990 and 2001.

Factors behind the sharp decline and the slow recovery

The causes of the sharp decline and the slow recovery of GDP after independence are not difficult to identify. Perhaps the most important and immediate cause was the breakup of the Soviet Union. The highly autarkic economic union, exacerbated by the system of central planning by command, fostered a production structure in these republics that was extremely rigid. The breakup of the system immediately resulted in a massive dislocation of sources of supply of raw materials and capital inputs and markets for outputs, disrupting production. The Central Asian republics depended on substantial transfer from the Soviet Union. Independence meant an end to these transfers leading to a sharp reduction in resources for investment and public expenditure. Independence also witnessed the emergence of new political problems causing instability and its adverse economic consequences. There was a significant rate of emigration of skilled ethnic minorities. The fear of fundamentalism led a number of Central Asian republics, notably Uzbekistan, to adopt measures towards its neighbours which hampered the development of trade. Being landlocked, Kyrgyz Republics and its immediate neighbours found it extremely difficult to create the infrastructure necessary to access new markets. Added to these difficulties specific to the region were all the problems of transition from central planning to a market economy that proved so overwhelming for most of the formerly centrally-planned economies.

It is extremely difficult, often quite impossible, to compare macroeconomic trends between the Soviet period and the contemporary time periods. Much of what then represented domestic flows, for which statistical documentation is unavailable, are now international transactions. Furthermore, the valuation during the Soviet period was subject to extremely distorted relative prices

that characterized the autarkic central planning of the time. And yet there seems to be few doubts about the following observations, largely based on the data in Table 2.

Table 2: Selected Macroeconomic Variables

| Saving/GDP (%) | | | Investment/GDP (%) | | | Current Account/GDP (%) | | Debt-Service Ratio: 2000 |
|--|------|------|------------------------------|------|------|-------------------------|-----------|-----------------------------|
| 1990 | 1995 | 2000 | 1990 | 1995 | 2000 | 1995 | 2000 | |
| 14.0 | 5.4 | 4.0 | 24.0 | 18.3 | 16.0 | -15.7 | -9.8 | 29.3 |
| Exports of Goods & Services as % of GDP | | | Percent of 2000 Export Value | | | | FDI (\$m) | |
| 1990 | 2000 | | Agric. | Fuel | Gold | Manufacturing | 2000 | |
| 29 | 43 | | 9.3 | 16.3 | 37.7 | 27.9 | -2 | |

Source: World Bank, 2002; Asian Development Bank, 2001; EIU Country Reports.

Note: Debt-service ratio is the ratio of debt service to exports of goods and services.

There was a sharp reduction in the rate of investment. The Soviet period was characterized by a high rate of investment, close to 25 per cent of GDP on the eve of independence. During the post-independence period the rate of investment sharply declined. One of the major weaknesses of the recent recovery is that it has not only failed to reverse this trend but has actually been characterized by a continued further decline in the rate of investment.

The decline in investment was associated with a drastic fall in the rate of domestic saving. The elimination of transfer from the Soviet Union and the disruption in the production structure led to a reduction in the capacity to save.

Kyrgyz Republic recorded large current account deficits in the post-independence period. In recent years this has declined substantially though investment continues to be heavily dependent on capital inflow. The continued decline in the rate of investment in recent years is a consequence of the

stabilization of the external imbalance by reducing the current account deficit without a compensating increase in the rate of domestic saving.

If all flows to the other republics of Soviet Union were counted as international trade, Kyrgyz Republic would show a high proportion of export to GDP prior to independence. Kyrgyz Republic's exports have grown, as a proportion of GDP, since independence although the absolute volume of exports has shown little growth. There has also been a large change in their composition. Most notably, traditional agricultural exports have declined: wool exports have been almost wiped out and livestock exports have fallen. This phenomenon – reflecting a possible adjustment to the pattern of production fostered by Soviet central planning – features prominently in the analysis of agricultural transition in the next section. Gold has emerged as the most important export. Kyrgyz exports have on the whole become highly vulnerable due to their dependence on a handful of staples: metal, dominated by gold, electricity and a handful of agricultural and processed items.

Kyrgyz Republic has had little success in attracting foreign direct investment. According to World Bank estimates it had a negative *net* FDI inflow in the year 2000. International indebtedness has increased significantly and the debt service approached 30 per cent of export earnings by the year 2000.

III. PRODUCTION SECTORS DURING THE TRANSITION

The backdrop: the Soviet strategy of specialization

Development in Kyrgyz Republic since independence can only be understood in the context of its historical development during the Soviet period. Soviet strategy was to create a specific pattern of agricultural specialization and industrial development in the Central Asian region to which Kyrgyz Republic belonged. Being a part of a highly autarkic economic union with the rest of the Soviet Union, with almost infinitely high common external tariff, would by itself have created a pattern of regional specialization that would have no necessary correspondence with the region's

comparative advantage in the context of integration with the global economy. The effect of integration with the rest of the Soviet Union was further modified and aggravated by a variety of instruments of central planning. In agriculture, the institutional framework for this planning was provided by the collectivized organization of agriculture in which rural households belonged either to state farms (sovkhoz) or to collective farms (kolkhoz). State farms, owned and managed directly by the state, paid the workers fixed wages, just as other state enterprises did, while the collective farms, in principle “owned” and managed by the members, paid them according to work points earned, the average value of work points being determined by the size of “distributed net income” relative to total work points earned by all workers. Each worker also had a tiny piece of private plot the produce of which was meant for their own consumption, but could also be sold to others. The composition of output was influenced by a variety of instruments: procurement quotas which were obligatory for the collectives; procurement prices which were arbitrarily determined by the state; prices set by the state for inputs; the administratively-rationed quantities of inputs and services; and the overall infrastructure created by state investment. While quantitative controls over the composition of output were widely used, purchase and sale prices were used to influence relative profitability of crops and products in order to promote the desired pattern of specialization. As early as in the 1940s, when the Stalinist strategy of “primitive socialist accumulation” was extracting massive surplus from agriculture, Soviet policy in Central Asia was using favourable procurement price as the principal instrument to boost the production of cotton.

Soviet strategy used all these instruments to promote a particular kind of regional specialization in agriculture: wool, livestock products and, to a lesser extent, cotton in Kyrgyz Republic; cotton in Tajikistan, Uzbekistan and Turkmenistan; and wheat in Kazakhstan. Thus incentives were sharply shifted in favour of the respective crops and products in the republics named by the combined use of the instruments listed above. Kyrgyz Republic became specialized in the production and export of wool, livestock products and, to a lesser extent, cotton. In spite of the well known problems under collective institutions and central planning, the country attained a certain degree of efficiency in the production of these goods.

In industries and services production was organized in large-scale state-owned enterprises. Soviet strategy of industrialization not only emphasized autarky at the union level, but also a degree

of self sufficiency for the regions and republics. The manufacturing industries in Kyrgyz Republic thus had a relatively broad base: it included producers' goods like electrical engines and centrifugal pumps, a variety of farm machineries, even trucks; intermediate goods like cement and bricks; consumption goods like, textiles, garments, processed food; and agricultural processing like cotton fibre. Kyrgyz Republic was also a major producer of electrical energy and coal. Apart from catering to domestic demand, much of these industries were based on the processing of material supplied by the rest of the Soviet Union or on demand for export to other Soviet republics.

The pattern of specialization imposed by Soviet central planning was based on the planners' notion of the comparative advantage of the republics. It is quite possible that their presumption was often correct, that Kyrgyz Republic had comparative advantage in wool, livestock products, electrical energy, cement and coal. And yet the particular method of promoting specialization in the republic was flawed. The instruments that they used resulted in a serious distortion of incentives. In agriculture incentives were sharply tilted in favour of livestock products and cotton, and against grain. In industries, planning decisions were rarely based on rational economic calculations. Uniformity and neutrality of incentives – the cornerstones of efficient allocation of resources to which economic theory recommends adherence unless there are demonstrated reasons for deviation, e.g., externality or some other form of market failure – were completely rejected. Systematic documentation of the extent of violation of the principles of uniformity and neutrality of incentives are not available; but enough evidence exists to suggest that there was widespread deviation from these principles.³ While the broad pattern of specialization might have been consistent with comparative advantage, it is almost certain that the distorted incentives during the Soviet period resulted in an extent of specialization well beyond the dictates of comparative advantage with all their attendant inefficiencies.

³ See A. R. Khan and D. P. Ghai, 1979, for some documentation of distortions of incentives in favour of cotton relative to other products.

Changes since independence: decline, recovery and structural change in agriculture

Independence and the breakup of the Soviet Union inevitably disrupted this system of agricultural specialization. The elaborate system of subsidizing specific products could not be sustained. The rigid central planning of supplies of inputs and marketing of outputs broke down and caused additional disruption of production. The institution of collective agriculture was incapable of coping with these dislocations and their inefficiency was exacerbated by their inability to cope with the transition. Additional problems discussed in the preceding section in the context of overall economic decline – political instability, civil strife, the loss of subsidies from the Soviet Union, the inability to create new infrastructure to facilitate trade with new markets – aggravated these difficulties. The result was a decline in agricultural production during the first half of the 1990s.

Table 3: Structural Change in Agriculture

A. Indices of Crop and Livestock Output for 1998-2000
(1989-91 = 100)

| | |
|----------------------|-------|
| All Crop Production | 129.1 |
| Food Crop Production | 114.5 |
| Livestock Output | 78.7 |

B. Indices of Output and Yield Per Ha in 1998/99 (1992=100)

| | Output | Yield/ha |
|--------|--------------|----------|
| Wheat | <i>163.3</i> | 1.01 |
| Cotton | <i>166.9</i> | 0.96 |

Note: Italicized data refer to 1999. All other data refer to 1998.

Source: World Bank, 2001a, The Economist Intelligence Unit Country Profiles, and FAO sources quoted in Suresh Babu and Alisher Tashmatov (eds), 2000.

As noted above, in Kyrgyz Republic the decline in agriculture was more modest than the decline in GDP during the first half of the decade and the real value added in agriculture was higher at the end of the decade than before independence. As expected, the transformation of agriculture did not affect all its components uniformly. Table 3 summarizes the features of agricultural transformation. Agriculture achieved substantial growth over the period as a whole; but the growth was limited to crop production including the production of food grains. Livestock products remained far lower at the end of the decade than at the beginning, resulting in the loss of exports of wool. Despite a massive move towards free trade, there was a shift in favour of trade replacement, away from exports towards import substitution. There was a sharp increase in the yield per hectare of wheat, indicating a shift of resources, including irrigated land, to this import-substitute crop. An exception to this pattern is cotton: while its production and yield fell in the major producing countries in Central Asia, in Kyrgyz Republic, a minor exporter of cotton, these actually increased.

These changes since independence could be explained with reference to three sets of factors: change in the system of incentives; change in the access to inputs and services; and change in agricultural institutions. The three sets of factors often overlap. For example, changes in incentives affect input supply and changes in institutions influence incentives. Thus the discussion of these three factors entails a degree of overlap.

Changes in the system of incentives

To what extent is the performance of agriculture related to changes in incentives for the sector? Does the change in the cropping pattern represent a correction of the extreme specialization that was fostered by the arbitrary Soviet policy in the past? One can only provide tentative answers to these questions in view of the lack of detailed information. Changes in the incentive system have been complex and are in need of a serious analysis for the formulation of future policies.

The breakup of the Soviet Union was followed by a gradual integration of Kyrgyz Republic with the global economy. It has radically reduced the average tariff rate and the extent of quantitative restrictions on trade. Domestically it has moved away from compulsory procurement,

price control, distribution control and the restriction of private enterprise. It is, however, by no means clear that it has succeeded in creating a uniform and neutral system of incentives, free of significant distortions.

Table 4: Estimates of Change in Terms of Trade for Agriculture

| Base Year | Terminal Year | Agric. Price/ Industrial Price (TOT 1) | Agric. Price/ GDP Deflator (TOT 2) | Annual % Change in TOT 2 |
|-----------|---------------|--|--|-----------------------------|
| 1990 | 1999 | 0.468 | 0.626 | -5.1 |

Method of estimation: Deflators are found for agriculture, industry and GDP by dividing the current price value added by the index of real value added (all shown in World Bank, 2001a). These are converted into indices for the terminal year. TOT 1 is the ratio of the index of the deflator for agriculture to the index of the deflator for industry. TOT 2 is the ratio of the index of the deflator for agriculture to the index of GDP deflator.

The terms of trade for agriculture appear to have deteriorated since independence. While direct estimates of sectoral terms of trade are not available, numerous pieces of evidence clearly point to an adverse movement in the relative prices of agricultural goods. Table 4 puts together two indirect indices of agriculture's terms of trade of which the second index, the ratio of agricultural prices to overall GDP deflator, appears to be more appropriate. It shows a substantial deterioration. Since it is hard to argue that the incentive system in the benchmark period was massively distorted in favour of agriculture, one must conclude that the current incentives discriminate against the sector.

A decline in terms of trade represents a fall in the purchasing power of income generated in the sector. Thus the change in per capita agricultural output is too optimistic an indication of the change in real income of the workers and entrepreneurs in the sector.

The decline in agriculture's terms of trade have come about mainly due to the need of the state to overcome the severe fiscal difficulty caused by the withdrawal of Soviet subsidies and the general loss of revenue due to the economic downturn in the years following independence. Large agricultural subsidies were removed. Large transport costs have made the prices of imported fertilizer higher than average world price while they have prevented an equalization of domestic prices of agricultural products with world prices.

Access to inputs and services

During the Soviet period, much of agriculture achieved a high intensity of input use. There was a serious decline in the quality and quantity of inputs available to agriculture after independence. In 1986-90, 252 kg of fertilizer was used per hectare of arable land.⁴ By 1992, it had fallen to a tenth of the rate of use at the end of the 1980s! By the end of the 1990s there had been little recovery.

The problem about access to inputs has been two fold: first, a steep rise in their price and, second, a disruption in the supply channel. The problem of high price was sometimes exacerbated by the lack of coordination of price reform for inputs and outputs. The rise in the cost of machines, spare parts and fuel is widely perceived as obstacles to access to inputs.

Irrigation is another major agricultural input to which the quality of access has deteriorated. The maintenance of the irrigation infrastructure and the operation of the pumps have been under pressure due to the broader problem of management of water distribution.

Access to traditional markets was disrupted due to the breakup of the former economic union. Most importantly, Kyrgyz Republic lost its traditional export market for wool. The replacement of

the traditional export market has been obviated, apart from the specific or low quality of the products, by the landlocked location of the country and the inability to finance the large investment needed to create new infrastructure.

The emergence of private farming, often organized by small individual and household farms, has created the need for the supply of a wide range of services in divisible units, of which the country has little experience. There is also an unmet need of small farmers for credit for the financing of their access to inputs and technology.

Problems of transformation from collective to private agriculture

Post-independence Kyrgyz Republic was in need of an urgent and inevitable transformation of the organization of agriculture as of the economy as a whole. The collective institutions, the sovkhoz and the kolkhoz, were not relevant any more. Experience in many countries over many decades had shown that it was virtually impossible to have an efficient organization of work and incentives under these institutions. Political support for them had evaporated with the demise of socialist central planning.

The alternative was not, however, clear or obvious. Circumstances in Kyrgyz Republic were not the same as in the successful cases of decollectivization, notably China. In China collectivization of agriculture had lasted for approximately two decades, with plenty of experience of peasant farming surviving among the rural population. In Kyrgyz Republic collectivization had lasted for nearly six decades, erasing all experience of peasant farming from the contemporary generation of agricultural population. Furthermore, the resource endowment of agriculture in Kyrgyz Republic, with a relatively mechanized and irrigation-dependent farming, created a special problem of transition to decollectivization due to the indivisibility of technology and management that characterized socialist planning. Large tractors and combines could not be divided up among individual peasants and the centralized management of irrigation was in need of complex

4 See World Bank, 2000a, p. 32.

restructuring of organization commensurate with the change in the organization of farming. These factors constituted an obstacle to transition to a system of equitable private peasant farming.

Notwithstanding these problems Kyrgyz Republic has become an outstanding case of replacing collective agriculture by a system of egalitarian peasant farming through nearly universal access to land. In the decade beginning independence, Kyrgyz Republic distributed approximately 72 per cent of all agricultural land (except pasture) among nearly 2,596 thousand individuals (510 thousand families) in the form of land shares. This ensured that pretty much every household resident in rural areas ended up with land entitlement. Initially access to land was given in the form of lease for 49 years which was later extended to lease for 99 years. In the year 1998 the national parliament conferred full ownership right on the peasants, including the right to sell land. Simultaneously a moratorium on the particular provision about the right to sell was declared for five years which was recently rescinded. Starting September 1, 2001 land can be bought and sold with certain restrictions, notably that only Kyrgyz nationals with two years' residence in rural areas can buy land.

The original distribution of land was reasonably equitable. Land was distributed according to the family size. There were large regional variations in the amount of land per person due to regional differences in the availability of distributable land per person. Land distribution was not, however, accompanied by measures to promote access to complementary resources to enhance the ability of the weaker households to perform as farmers. This must emerge as an important issue in the future as the legalization of sale of land creates the possibility that more efficient farmers would buy up the land of the weak and inefficient farmers. The "Management of Land Act" of December 2000 provides for a legal limit on land concentration by making the maximum size of the agricultural land plot owned by any individual equal to "20 times the average land share established by a particular local state" with an absolute limit of 50 ha.⁵ This limit appears too high to guarantee a system of egalitarian peasant farming. Other policies need to be geared to enhance the capability of the small peasants to remain viable and competitive.

⁵ See the article by Tobolek Omuraliev, Minister for Local Government and Regional Development, in *Law and Business*, 2001.

Of the households that received land the highest proportion completely opted out of the collective system. A fair proportion of them, however, continued to be parts of cooperatives while others formed joint-stock companies. A number of state agricultural enterprises continue to operate, usually specializing in seed and livestock development. Table 5 shows a distribution of land among principal organizational forms of farming.

Table 5: Forms of Organization in Kyrgyz Agriculture
Per cent of total land, 2001

| | |
|-----------------------------------|------|
| 1. Dekhkan (peasant) Farmers | 41.6 |
| 2. Collective Peasant Enterprises | 26.3 |
| 3. Agricultural Cooperatives | 14.5 |
| 4. Joint-Stock Companies | 3.8 |
| 5. State Enterprises | 14.9 |

Note: The estimates are based on the data shown in the paper by Kadyrkulov in *Law and Business*, 2001. The actual figures of the proportions of land for each category shown in the paper are different because, oddly, it shows the shares as proportions of land belonging to all non-state enterprises, thereby making the total of all shares well above 100 per cent. Reconciling these figures with the actual distribution of land to households is difficult because the sources of these data make confusing shifts from “agricultural land” to “sown land” and other definitions of total land. It, however, appears that 1, 3 and 4 represent households who received land as part of the land reform programme. Item 2 appears to represent those of the former collectives who, despite individual title to land, retain a nominal “collective” structure of organization. This is, however, a conjecture. Considerable effort to clearly determine the difference between 2 and 3 in the Table did not produce satisfactory result.

While many peasant households became independent farmers, others remained in cooperatives. The system was flexible enough to permit the independent peasant farmer to continue to receive certain services from the cooperative from which he/she has withdrawn. These cooperatives have no resemblance with the former collectives. They provide a minimum of services

that are sufficiently indivisible to create an incentive on the part of the individual peasant households to combine in a cooperative arrangement for their provision.

As stated in the note to Table 5, it is unclear to what extent the collective peasant enterprises differ from the agricultural cooperatives. It is, however, clear that they too are fundamentally different from the collective farms of the Soviet period. State enterprises are largely specialized farms engaged in seed and livestock development.

The continued industrial decline

The performance of the industrial sector has been infinitely gloomier than that of agriculture. Within industries, manufacturing sectors have performed most dismally. Two “non-manufacturing” activities, gold and electric energy have performed differently. The coming into production of the Kumtor gold mine in 1997 added a significant boost to the growth of GDP. Between 1996 and 2001, almost 22 per cent of the *increase* in GDP has been due to the output of Kumtor gold mine. In 2001, value added by the gold mine accounted for nearly 5 per cent of GDP and 30 per cent of value added in industries.⁶ By 2001 the output of electric energy also exceeded the level at the time of independence.

As Table 6 shows, the only manufacturing industry that has avoided a decline in output since before independence is cotton fibre, an agro-processing industry with a small proportion of value added in manufacturing. All other traditional manufacturing sectors performed dismally. The factors behind the decline are diverse. For intermediate goods – cement, coal and bricks – the loss of export market in former Soviet Union was the principal reason. For capital goods – electrical engines and pumps and trucks – it was a combination of the disruption in the supply of components from sources in former Soviet Union; the lack of demand on the part of the traditional domestic users, chiefly the collective and state farms which had ceased to exist; and the inability to compete with imports under a liberalized trade regime. Individual peasants were not able to replace the demand for agricultural

⁶ Unfortunately the data on the contribution of Kumtor are not unambiguous. The value added figures reported here are the lowest of the alternative estimates that the authors of this report encountered.

machineries that in the past was due to the collective and state farms. In the case of consumption goods the decline was due to a combination of the above factors and the decline in domestic consumption demand.

Table 6: Outputs of Selected Industries

| Industry | Unit | 1991 | 1995 | 1999 | 2000 |
|---------------------|---------------|-------|------|------|------|
| Electric Energy | b. KWH | 14.2 | 12.3 | 13.2 | 15.0 |
| Coal | m. Tons | 3.5 | 0.5 | 0.4 | 0.4 |
| Electric Engines AC | Thousand | 234.5 | 49.1 | 1.2 | 0.8 |
| Centrifugal Pumps | Thousand | 44.9 | 12.1 | 0.7 | 0.7 |
| Cement | m. Tons | 1.3 | 0.3 | 0.4 | 0.5 |
| Bricks | million | 874.0 | 96.4 | 90.0 | n.a. |
| Cotton Fibre | Th. Tons | 22.1 | 17.7 | 24.5 | n.a. |
| Textiles | m. Sq. meters | n.a. | 23.2 | 14.0 | 8.7 |

Source: National Statistical Committee.

The quantitative magnitude of the fall in aggregate industrial value added is an inadequate indicator of the adverse impact of industrial decline on the poor. This is because a good part of the incremental value added in the most rapidly growing industrial sector, gold, is lost to Kyrgyz Republic because it takes the form of factor income paid abroad to the foreign investors at Kumtor. As will be shown later, since Kumtor started production, the growth rate of GNP has been one percentage point below the growth rate in GDP. Although it is well known that GNP is a truer index of average living standard than GDP, all official growth measurements in Kyrgyz Republic are made in terms of GDP. There is a second reason why the change in aggregate industrial value added is an inadequate indicator of the adverse effect of the sector's decline on the poor. Of the value added

contributed to GNP by the best performing sectors, gold and electric energy, the proportion that accrues to poor households in the form of wage is much smaller than the average of that proportion for the rest of the industries. A unit increase in value added in gold/energy, offset by a unit reduction in value added in traditional manufacturing would leave poor households worse off.

The decline in industrial output was accompanied by the deterioration in the financial situation of enterprises. At its peak, in 1996, 41 per cent of state enterprises sustained loss and this ratio remained as high as 36 per cent in 1999.⁷ This has a detrimental effect on public and aggregate domestic saving.

Kyrgyz Republic has promoted widespread privatization of industries. Available estimates of privatization are not transparent. A recent estimate suggests that, by early 2001, 89 per cent of industrial enterprises had been privatized.⁸ Since privatization has been concentrated among smaller enterprises, this is almost certainly an exaggerated indicator of the extent of privatization of industries in Kyrgyz Republic. The same source estimates that private enterprises contributed about 20 per cent of manufacturing output in 2001. So far there is no evidence of a dynamic private sector performance with a foreseeable prospect of arresting the decline of the sector.

Other sectors

Outputs of transport, trade and many other services are closely linked with the production sectors, principally agriculture and industries. It is therefore not surprising that GDP originating in these sectors declined sharply over the decade under consideration. Even during the period of recovery, only the trade sector registered a rapid and steady growth. Indeed this sector's real value added increased since 1995 at a faster rate than GDP. The growth of transportation services was substantially slower than the growth in GDP. Public administration, after moderate growth until 1999, registered absolute decline, which may have been a deliberate policy under the stabilization

⁷ United Nations, 2001, p.34.

⁸ Ibid. p. 29.

programme. While slow growth in services can be caused by the low demand due to the slow growth of production sectors, often the direction of causation is reversed. This is particularly true of transport and financial services whose supply inelasticity can be a constraint on the growth of the economy. It is highly likely that Kyrgyz Republic has faced such constraints during its recovery phase.

IV. THE EMPLOYMENT SCENARIO

The principal mechanism through which economic growth improves the welfare of the poor and helps reduce poverty is by increasing remunerative employment. Labour is often the only resource that the poor have. Unless economic growth draws labour in adequately large numbers to the growing sectors, the impact of growth on poverty reduction is weakened. A rise in unemployment – resulting from a reduction in self employment and wage employment taken together – is almost always associated with a rise in the incidence of absolute poverty.

In the decade since independence much of traditional industries and urban services have declined. The sectors that have contributed to the “recovery” of industries since 1996 have neither absorbed much labour nor been specifically located in urban areas. In these circumstances, one would have expected a sharp rise in urban unemployment. Indeed rising urban unemployment has been characteristic of economic reform in all transition economies, including not only the overwhelming majority of cases of stagnation and negative growth (e.g., former Soviet Union) but also China which has grown at a historically-unprecedented rate. Paradoxically, the registered unemployment rate in the Kyrgyz Republic has remained low and stable, well below 5 per cent and declining during the second half of the 1990s.⁹

⁹ This is according to the NSC data. It is well known that these data are often criticized for failing to capture the “discouraged” workers who stop seeking employment due to a perceived low probability of finding one. Broader estimates of unemployment, based on the Kyrgyz Poverty Monitoring Surveys of 1996 to 1998, indeed show a higher level of unemployment if discouraged workers, as well as all those who are unemployed according to strict ILO definition, are taken into account. But once again there is no rising trend over the limited period of sluggish growth for which these estimates are available. Indeed broad unemployment, thus defined, fell between 1996 and 1998.

Table 7: Growth in Real GDP and Employment between 1996 and 2000
(Cumulative per cent growth over the period)

| Sector | Real GDP | Employment |
|----------------------------|-------------|------------|
| Agriculture | 29.9 | 21.0 |
| Manufacturing & Mining | 49.2 | -19.5 |
| Construction | -25.5 | -22.3 |
| Transport | 13.3 | -27.6 |
| Communication | 10.6 | -5.8 |
| Trade, Hotels, Restaurants | 36.5 | 21.3 |
| Other Services | 0.4 | -2.7 |
| Total Economy | 22.2 | 7.0 |

Note: Growth rates for the entire economy and agriculture are from Table 1. All other growth rates of output and employment are from NSC sources.

The explanation of the phenomenon is provided by the data in Table 7 which shows the allocation of incremental employment during the period of recovery. Growth was concentrated in three sectors of which agriculture was the largest with the biggest *absolute* increase in output and income. A second sector which experienced growth is trade, hotels and restaurants. It is possible a good part of their growth was due to ancillary agricultural activities and informal activities in the urban areas. A third sector in which output growth took place is manufacturing and mining. More accurately, output growth took place in two sub-sectors of this broad sector, namely gold mining and electrical energy. For the rest of the manufacturing sector there was a decline in output.

Of the three growing sectors, manufacturing and mining experienced employment-hostile growth. This sector as a whole had a highly negative output elasticity of employment: a 49 per cent growth in real value added leading to a 20 per cent reduction in employment. The explanation must lie in the fact that the growing segment of the sector, gold mining and electricity, has a far smaller

labour intensity than the stagnating and declining segment, the traditional manufacturing, details that are hidden because of the aggregation of the two disparate segments.

The other two growing sectors were highly labour intensive: once the output and employment growth are converted into annual compound rates, the output elasticity of employment is 0.72 for agriculture and 0.6 for trade. It is the high employment intensity of growth in these two sectors which helped preserve the linkage between growth and poverty reduction.

It should nevertheless be noted that these are highly perverse trends. One of the incontrovertible generalizations in economics is that during the process of growth labour moves out of (low-productivity) agriculture into (high-productivity) non-agricultural activities. The opposite trend in the recent past was without doubt due to the activation of a survival mechanism without which, as will be shown below, the problem of poverty and unemployment would have been far more acute in urban areas. Notwithstanding all the accusation of rigidity, the Kyrgyz labour market had enough *de facto* flexibility to permit the movement of labour and population out of urban areas into agriculture in rural areas to enable the survival mechanism – the informal social security – to function. It should also be noted that the mechanism covered more than the agricultural sector. Informal trading and related activities also provided a shelter from unemployment and poverty.

V. POVERTY

Broad indicators of poverty and human development Since independence

The sharp fall in output and income and the steep rise in inequality in the distribution of income in the period since independence should lead one to expect a serious worsening of poverty and welfare. The actual extent of their deterioration and the time trend thereof are, however, very hard to establish due to the impossibility of assembling data on a comparable basis for the Soviet period and contemporary years. And yet some broad magnitudes of change can be gauged from the information in Table 8. Even for a relatively high poverty threshold, the proportion of population in

poverty was low at the end of the 1980s. Six years later, into the third year of independence, there was a catastrophic rise in the proportion of population in poverty according to these admittedly rough estimates.

To look at a broader index, that of Human Development which averages the performance of a country according to life expectancy, education and income measured in purchasing power parity dollar, Kyrgyz Republic slipped downwards between 1991 and 1999. A look at the individual components of human welfare and capability does not reveal unambiguous trends. Life expectancy declined marginally, but infant mortality improved.

Table 8: Indicators of Poverty, Inequality and Human Development

| Per cent of Population In Poverty | | Rank among Nations in Human Development Index | | | |
|--|---------|--|-------|------------------|-------|
| ----- | ----- | ----- | ----- | ----- | ----- |
| 1987-88 | 1993-94 | 1991 | 1999 | | |
| 12 | 84 | 83 | 92 | | |
| Gini Index of Per Capita <i>Income</i> | | Life Expectancy | | Infant Mortality | |
| ----- | ----- | ----- | ----- | ----- | ----- |
| 1987-90 | 1996-99 | 1991 | 1999 | 1990 | 1999 |
| 0.31 | 0.47 | 68.0 | 67.4 | 30 | 26 |

Note: Poverty is measured for a poverty line of 1990 PPP\$ 120 per person per month. HDI ranks are based on a total of 173 countries in 1991 and 162 countries in 1999. The change in HDI rank is not due to the change in the sets of countries between the two years. To illustrate what is meant by this, in 1999 three new countries had ranks above Kyrgyz Republic while four countries with ranks above that of Kyrgyz Republic in 1991 were excluded. A higher numerical rank indicates a lower performance, one being the rank of the best-performing country. Life expectancy is in years at birth. Infant mortality is per thousand live births.

Source: Poverty figures are from UNDP, 1999 (original source of the estimates is Milanovic, 1998); HDI ranks are from UNDP, 1993 and 2001. Gini indices are from World Bank, 2000b. Life expectancy is from UNDP, 1994 and UNDP, 2001. Infant mortality is from World Bank, 2001a.

An obvious source of the increasing incidence of poverty is the sharp fall in income per capita. But the effect of reduced income on poverty was aggravated by the rising inequality in the distribution of income. Table 8 shows that Kyrgyz Republic had a reasonably egalitarian income distribution before the end of the Soviet regime. By the late 1990s the distribution of income had become more unequal than for an average developing country.

Poverty trends in the period of recovery

The above data, though useful in indicating the trend in poverty and welfare during the entire period of transition, are far less than adequate for the formulation of operational ideas about the reduction of poverty. For that one needs more detailed studies of the nature and extent of poverty, with separate information for rural and urban areas. In particular one needs to analyze the effect of economic growth on poverty in the period of recovery.

Table 9 shows the estimates of poverty (the proportion of population below the poverty line) and inequality (the Gini index of the distribution of per capita expenditure) in Kyrgyz Republic, separately for the nation and for urban and rural areas. The poverty line is based on the cost of a food basket that provides approximately 2100 kilocalories per person, its composition being based on the average food consumption pattern of the poorest third of the population. To this is added an amount for minimum non-food expenditure.¹⁰

Table 9: Poverty and Inequality in Kyrgyzstan

¹⁰ For 1996 the cost of the food basket was 2177 Som (approximately \$ 170). To this was added an amount for minimum non-food expenditure in a way that the latter was 39.8 per cent of the poverty line. For all subsequent years, the cost of the food basket was adjusted upwards by the rise in the cost of food and an allowance was made of non-food expenditure of the same proportion of total expenditure. See Z. Kudabaev and S. Ibragimova, 2001.

| | Proportion of Population in Poverty | | | Gini Ratios of Expenditure | | | Per Capita Real Expenditure | | |
|------|-------------------------------------|-------|-------|----------------------------|-------|-------|-----------------------------|-------|-------|
| | Total | Urban | Rural | Total | Urban | Rural | Total | Urban | Rural |
| 1996 | 43.5 | 30.3 | 49.6 | 0.370 | 0.370 | 0.350 | 5712 | 6960 | 4937 |
| 1997 | 42.9 | 22.2 | 55.3 | 0.410 | 0.380 | 0.360 | 5749 | 8096 | 4357 |
| 1998 | 54.9 | 42.2 | 62.4 | 0.360 | 0.364 | 0.341 | 4341 | 5136 | 3865 |
| 1999 | 55.3 | 42.4 | 60.0 | 0.372 | 0.371 | 0.362 | 4382 | 5353 | 4024 |
| 2000 | 52.0 | 43.9 | 56.4 | 0.326 | 0.322 | 0.323 | 4399 | 4902 | 4131 |
| 2001 | 47.6 | 41.2 | 51.0 | 0.320 | 0.313 | 0.351 | 4663 | 5179 | 4385 |

Note: These estimates are from the National Statistical Committee (NSC). The NSC estimates for different years are based on the data from the following sources: 1996-98: Kyrgyz Poverty Monitoring Survey (KPMS); 1999: Household Energy Survey (HES); 2000-2001: Household Budget Survey (HBS). The NSC takes the view that the KPMS and the HES surveys employed very similar methods, the only significant difference being that the questions on food consumption were more aggregated in the HES. Their belief that this did not introduce a bias is supported by the finding that the ratio of food expenditure to total expenditure is very similar according to KPMS 1998 and HES. The HBS for 2000 and 2001 are nationally representative sample surveys as were the KPMS and HES although they were designed independently. On-going work at the World Bank, based on a panel of 1043 households from the HBS for 1998, 1999, 2000 and 2001 broadly confirm the above changes except that their findings suggest a somewhat stronger poverty reduction during this shorter period: they find a rise in urban poverty only in 1999. Per capita real expenditure is at constant purchasing power of 1996 (deflated by the CPI).

Trend in rural poverty is fairly easy to describe: it rises until 1998 when it reaches a peak. Thereafter rural poverty declines steadily until 2001.

Urban poverty had a more zigzag course. A highly implausible change took place between 1996 and 1997 when average urban income shot up and urban poverty declined sharply. Barring the possibility of a statistical quirk – a really strong possibility – this can only be explained by large-scale income transfer in favour of urban residents by the state in that year. Since there is not enough information to judge the validity of this possible explanation, this report will not discuss this figure any further. Urban poverty increased between 1996 and 1998. Thereafter it did not change much. There was a small overall decline between 1998 and 2001, but only after a small rise in 2000.

For Kyrgyz Republic as a whole, the period since 1998 may be regarded as a period of poverty reduction, disregarding an insignificant rise in 1999. Between 1998 and 2001 there was a 7.3 percentage point reduction in the proportion of population in poverty. In this period the proportion of population in extreme poverty – those whose total expenditure is no greater than the cost of minimum food subsistence only – shows a steadier reduction in both urban and rural areas. Proportionate poverty gap – showing the average depth of poverty – and the squared poverty gap – measuring the change in poverty by taking into account the distribution of expenditure among the poor themselves – show steady improvement after 1999, with a slight worsening between 1998 and 1999.¹¹ For a deeper understanding of the growth-distribution-poverty nexus it is useful to scrutinize the change in poverty and related indicators in each year.

1997

Between 1996 and 1997 GDP increased at 9.9 per cent. Once the contribution of Kumtor is excluded the growth rate of GDP falls to 5.3 per cent, or, in per capita terms to about 4 per cent. Agricultural output increased by 12.3 per cent. Why did rural poverty increase? The answer lies in the fall in per capita real personal income in rural areas by almost 12 per cent. How can a 12 per cent increase in real output of agriculture, the overwhelmingly dominant source of rural income, translate into a 12 cent fall in real income? It is impossible to account for all the factors that have been in operation, and it is possible that a part of the difference is due to errors of one kind or another. But several factors preventing the translation of output growth into income growth can be enumerated. In 1997 there was almost a 5 per cent increase in employment in agriculture.¹² A second possibility is the decline in agriculture's terms of trade. Data are not readily available to estimate the change in agriculture's terms of trade in that year, but, as this report argued above, a conservative estimate of the annual reduction in agriculture's terms of trade during the 1990s was 5.1 per cent. There could have been a sharper reduction in terms of trade, especially once the government's fiscal intermediation is factored in. Together these two factors could have more than wipe out the effect of increased output on growth in per capita income. There were additional factors: e.g., the growth is

¹¹ These other indicators, estimated by the NSC, are not shown in this report.

non-agricultural rural income was probably very slow if at all positive. There was also a slight increase in the Gini index of expenditure distribution. The change in urban poverty has already been discussed above.

1998

Poverty increased everywhere. The principal reason is the weak growth of the economy. GDP increased at 2.1 per cent. Once Kumtor is excluded, the growth rate of GDP falls to 1.06 per cent, leading to a fall in per capita GDP. Agricultural output increased by 2.9 per cent. The rate of increase in agricultural employment and rural population was of the same order of magnitude. Thus output per person in agriculture showed no increase. Additional factors, e.g., change in terms of trade, a slower growth of non-farm rural output and state intermediation in income distribution, could have exerted additional influence on income. Per capita expenditure in both urban and rural areas fell. Despite a slight improvement in the distribution of expenditure, poverty increased.

1999

GDP increased by 3.7 per cent. Once Kumtor is excluded, the rate of GDP growth rises to 4.1 per cent due a fall in Kumtor's contribution to GDP in 1999. Agricultural output increased by 8.2 per cent. Per capita expenditure increased in both urban and rural areas by more than 4 per cent. There was a slight increase in the Gini indices, but this could not outweigh the poverty-alleviating effect of income growth. Poverty fell overall and in rural areas while remaining almost the same in urban areas.

2000

GDP increased by 5 per cent and at a slightly lower rate once the effect of Kumtor is excluded. Agricultural output increased by 3.9 per cent. Rural per capita expenditure increased by 2.7 per cent and the rural Gini index fell significantly. There was a substantial reduction in rural

12 Sectoral employments shifts cited in this sub-section are from NSC sources. .

poverty. Urban per capita expenditure fell by more than 8 per cent. Its potential adverse effect on poverty was partly offset by the significant improvement in the Gini index. There was a small increase in urban poverty. Poverty for Kyrgyz Republic as a whole fell significantly.

Why did urban per capita income fall? Growth in urban areas, though not directly measurable, was weak. Furthermore, this year agriculture's absorption of employment fell sharply, to only 1.6. This almost certainly led to a substantial rise in urban unemployment.

2001

GDP increased by 5.3 per cent (slightly faster if the contribution of Kumtor, which experienced slower growth, is excluded) and agricultural output increased by 6.4 per cent. These were translated into healthy growth in per capita expenditure, by 5.7 per cent in urban areas and 6.2 per cent in rural areas. Gini index fell for the nation and for urban areas. It increased a little in rural areas but was not able to make much of a dent in the favourable effect on poverty reduction of the robust rise in rural per capita expenditure. The result was a substantial reduction in poverty in both urban and rural areas.

Lessons

The Kyrgyz experience in recent years clearly brings out what is widely recognized in the poverty policy analysis: a reduction in poverty requires a growth in income and the avoidance of an increase in inequality. Growth is a necessary precondition for poverty reduction because poor societies have little room for poverty reduction by redistribution alone; but a growth in income is not sufficient because its positive effect on poverty reduction can be offset by a worsening of the distribution of income. In 2000 the large reduction in per capita urban expenditure would have increased poverty much more but for the significant improvement in the distribution of expenditure.¹³ To translate a given increase in income to an equivalent reduction in poverty, a

¹³ It is useful to note that the change in the Gini index does not necessarily capture the effect of the change in the distribution of income/expenditure on the poor. An improvement in distribution at the lower end can be offset by an

worsening of the distribution of income must be avoided. An improvement (deterioration) in the distribution of income magnifies (compresses) the effect of a given increase in income on poverty reduction.

Over the period under review inequality remained the same for rural areas and decreased significantly for urban areas and for the nation. What was behind the avoidance of inequality? This report highlights the egalitarian land distribution, without which rapid rural recovery might have been disequalizing, and the substantial labour absorption into the growing agricultural and urban informal sectors.

It should perhaps be noted that while Kyrgyz Republic has attained greater equality over the period under review, the absolute degree of inequality can not be considered to be low. A Gini index of 0.32 for *expenditure* is quite consistent with a Gini index higher than 0.4 for *income* (see Table 8 for an estimate of income Gini in the 1990s) which represents no less than the average inequality in a contemporary developing country.

In Kyrgyz Republic poverty and inequality estimates are measured in terms of expenditure rather than income. This is consistent with the argument often made by economists that (consumption) expenditure is a more reliable indicator of *permanent* income than current income which is affected by transitional fluctuations. An argument weighing against this is that the poor can maintain consumption above poverty threshold in a bad year by selling assets or acquiring debt which reduces their capacity to cope with poverty in the long run. According to this argument poverty should be measured both in terms of consumption and income to get a more balanced view of changes that are occurring. Unfortunately, Kyrgyz household surveys enumerate income so incompletely that this is impossible to do.

Another important lesson of the Kyrgyz experience, so often lost sight of in poverty policy analysis, is that a given growth in GDP does not always translate itself into an equivalent growth in

equivalent deterioration in distribution at the upper end with no change in the Gini index. This, however, improves the welfare of the poor and reduces poverty.

personal income and expenditure in terms of which the incidence of poverty is measured. Disconnect between the two has occurred frequently in the Kyrgyz Republic, leading to the failure of GDP growth to reduce poverty. Examples include rural areas in 1997 and urban areas in 2000. This can happen due to any of a large number of factors: (a) a shift in sectoral terms of trade; (b) a shift in sectoral composition of employment and/or population; (c) macroeconomic policies resulting in a rise in the factor shares of business and government and a fall in the factor share of households; (d) a change in the composition of incremental output resulting in a shift in factor share in favour of business and government and against households (e.g., a sharp rise in the output shares of sectors like Kumtor and energy).

Who are the poor?

Less is known about the characteristics of the poor than is necessary for the design of an efficient poverty reduction programme, especially the design of programmes of direct interventions to benefit the poor that would minimize the leakage to the non-poor. In this sub-section some of the known characteristics of the poor are summarized.¹⁴

About 70 per cent of the absolute poor and 75 per cent of the extreme poor are residents of rural areas making rural Kyrgyz Republic the principal focus of poverty reduction programmes. Poverty also has a regional concentration: its incidence is highest in Naryn followed by Talas, Jalal-Abad and Issyk-Kul. The headcount rate of poverty in Naryn was more than 80 per cent higher than national average in 2001. It was a third higher than national average in Issyk-Kul. The incidence of poverty in Talas and Jalal-Abad was between that in Naryn and Issyk-Kul.¹⁵ These four oblasts are also ranked poorest in terms of per capita income. Poverty reduction programmes in Kyrgyz Republic therefore needs to focus on these poor provinces.

The poor have larger families than the non-poor. Poverty is likely to be higher in female-headed households than in male-headed households. The poor have a lower endowment of

¹⁴ These are substantially based on World Bank, 2001b and unpublished analysis of more recent HBS.

education. But the difference between their educational endowment and that of the non-poor is not dramatic. To give an example, the poor have 9.5 years' schooling on the average as compared to 10.5 for the non-poor. Per capita private spending on education for the poor households is, however, only 35 per cent of the same for the non-poor households. The poor also appear to have less vocational training than the non-poor. The poor are more dependent on subsistence income than cash income. At the same time, implying a possible conflict with the above, they are also more specialized in the production of cash crops. The former finding has been widely observed to be a characteristic of the poor in the developing countries. The latter finding is in agreement with the observation above that the dominant cash crops are less profitable than grain.

The landholding characteristic of the poor is somewhat unexpected: the poor do not have a lower endowment of land than the non-poor. Indeed they have a little more land per capita than do the non-poor. It therefore appears that the egalitarian land reform in Kyrgyz Republic may have succeeded more in reducing the inequality in the distribution of income than in eliminating poverty. This shows that land endowment by itself can not eliminate poverty for the families which have few other resources and a lack of experience of farm management.

V. POLICIES FOR POVERTY-ALLEVIATING DEVELOPMENT

Policy objectives

The purpose of this section is to bring out the policies and programmes implied by the analysis in the preceding sections. It outlines the policies and programmes that Kyrgyz Republic and its international development partners need to adopt in order to facilitate poverty-alleviating growth. The emphasis is on macroeconomic aspects of policy making although references are made to those microeconomic policy instruments which have close links with the policy objectives.

15 These regional estimates are also from NSC sources.

Poverty-alleviating growth combines the objectives of growth and poverty alleviation. It is more than growth in so far as it envisages the wide dissemination of the benefits of growth among all income groups including the poor. It is more than poverty alleviation in so far as it stipulates a rapid rise in the average standard of living, not merely raising the absolute poor up to a minimum standard of living. Its basic elements are: (a) a rapid increase in national product; and (b) a rapid increase in the welfare of the poor. Given high enough a rate of growth, the objectives of the strategy are ensured if inequality in the distribution of income is not allowed to rise and, wherever possible, measures are adopted to improve the distribution of income. This section in turn deals with the principal elements of a growth strategy and an income-distribution strategy keeping in mind that the two are inextricably linked. Different growth strategies have different distributional outcomes. Different approaches to income distribution have different growth outcomes.

Elements of a Growth Strategy

The recent pattern of growth is not sustainable

The recovery of the Kyrgyz economy during the past six years had a lopsided sectoral composition. Between 1996 and 2001 annually compounded sectoral growth rates have been as follows:

| | | |
|------------------------------|----------|---|
| GDP | 5.6 | |
| Agriculture | 7.9 | |
| Manufacturing & construction | -2.8 | (excluding gold and energy) |
| Services | negative | (precise calculation requires clarification of the exact definition of the sector which is difficult) |

This pattern of growth is not sustainable. Agricultural growth has been stimulated so far by import substitution which was essentially a correction of the distorted pattern of regional specialization imposed by Soviet planning in the past. Soon this will lose steam. Further growth of

agriculture must be based on new sources of demand. At the moment it is hard to visualize a rapid growth of export demand for agricultural goods on a broad front. Growth of the sector must largely be based on the growth of domestic demand. There must also be a growth in the domestic production of inputs for agriculture and the expansion of trade and marketing services without which the growth of agriculture will face supply-side constraints. In the final analysis, the composition of sectoral growth must return to the limits of the Engels parameters which are among the most durable generalizations regarding the pattern of economic growth. Manufacturing, construction, transportation and other services must attain growth rates that are higher than that of agriculture and GDP.

*The current rate of growth is an unreliable basis
for steady and sustained poverty reduction*

There are several strong reasons to believe that the current rate of growth is not an adequate basis for steady, sustained and rapid reduction in poverty. To start with, poverty reduction was erratic during the last six years and, indeed, poverty in 2001 is higher than in 1996 for urban areas and only marginally lower for the nation as a whole. The annual growth in GNP is almost one percentage point lower than the annual growth in GDP in terms of which growth targets are set.¹⁶ This means that a 5.0 per cent growth in GDP translates to approximately 2.5 per cent growth in *per capita* GNP. But a given GNP growth typically translates into a smaller growth in *household* income.¹⁷ Thus, the annual growth in per capita household income would be less than 2.5 per cent if GDP grows at 5 per cent. As shown above, this is rate of growth in overall household income is quite consistent with the impoverishment of large groups due to such factors as changes in sectoral terms of trade.

¹⁶ NSC makes estimates of GNP (called Gross National Income and defined as GDP less net factor income on property paid abroad) at current price only. The conclusion is based on estimates of real GNP obtained by deflating the current price estimates by the GDP deflator.

¹⁷ In other words, the elasticity of household income with respect to GNP is less than one. This is a widely-observed phenomenon in developing countries and is also generally the case in Kyrgyz Republic (see the year-by-year analysis of poverty above).

But there is a stronger reason to suspect that this rate of growth in income would be an inadequate basis for poverty reduction. As repeatedly emphasized above, one of the basic elements in Kyrgyz Republic's poverty performance in the recent past was the avoidance of an increase in inequality in the distribution of income/expenditure. There have been small fluctuations in Gini indices from one year to another but no trend. Indeed the Gini indices for urban areas and the nation at the end of the period have been lower than what they were at the beginning of the period of recovery. It is necessary to analyze in depth the reasons why this stable and favourable distribution, so uncharacteristic of growth under reform in the period of globalization, has obtained in Kyrgyz Republic. Pending such research, this report has surmised that a large part of this has been due to concentration of growth in agriculture, which experienced the implementation of a highly egalitarian distribution of land and absorbed labour from outside the sector. Agricultural growth has so far been based on the use of traditional inputs and has avoided facing up to technological progress. As efficiency and high factor productivity inevitably become more dominant in production decisions, tendencies for polarization will occur in agriculture, a process that is likely to be facilitated by the recent legalization of land sale.

This report has also argued that growth in trade services and informal activities has been equalizing due to its large absorption of labour. Once growth in non-agricultural sectors resumes, it is likely to be less egalitarian than growth in agriculture, trade and informal services have been. Market-driven returns to different skill levels, entrepreneurial ability and the ability to take risks would be more differentiated in the non-agricultural sectors even if public policy keeps emphasizing distributional equality. Thus, in order to maintain the modest pace of poverty reduction achieved in the recent past, the rate of GDP growth would have to be higher, say at least 6 per cent per year. To make a more meaningful impact by way of poverty reduction closer to the millennium goal, Kyrgyz Republic would need to aim at even higher a GDP growth rate, 7 per cent or more. With a GDP growth rate of 4 per cent – as is projected in the Interim National Strategy for Poverty Reduction (INSPR) for 2005 – it is unlikely for the Kyrgyz Republic to achieve any meaningful poverty reduction under the assumptions outlined above.

The incremental capital-output ratio will rise

During the first five years of recovery – 1996 to 2000 – the average of the annual investment/GDP ratios was above 19 per cent, falling from more than 25 per cent in 1996 to 16 per cent in 2000. Incremental capital-output ratio (ICOR) is much too crude an instrument of projection. There is nevertheless a strong linkage between the rate of investment and the growth rate in GDP. Very roughly, the crude ICOR was about 3.5 during the period of recovery (assuming no lag between gross investment and increment in GDP). Using this assumption, the achievement of a 6 to 7 per cent growth in GDP would require a rate of investment between 21 per cent and 24.5 per cent of GDP.

But the incremental investment cost of output growth – the ICOR – would rise as the sectoral shares of incremental GDP more closely conform to the normal growth pattern. Agriculture is not only less capital intensive, agricultural growth in the recovery period has followed a path of intensive use of labour and traditional inputs and postponing capital investment, including investment in replacement. In the future, agriculture will need to face up to the capital investment necessary for the rehabilitation of the irrigation system, application of modern inputs and the provision of infrastructure. Non-agricultural sectors are significantly more capital intensive than agriculture. There is an implicit admission of this in the INSPR, which projects a steady investment rate of 16 per cent between 2001 and 2005 and a steady decline in the real GDP growth rate from 5 per cent in 2001 to 4 per cent in 2005. One might interpret this projection as an implicit assumption that the crude ICOR would rise from 3.2 in 2001 to 4 in 2005. While the direction and rate of change in the ICOR envisaged in the INSPR projections appear right, the levels may still turn out to have been optimistic. Thus it is likely that the rate of investment required for modest to rapid poverty reduction would have to be higher than the 21 per cent to 24.5 per cent range stipulated above.

Much of investment would embody indivisibility and externality

The matrix of measures in the INSPR document outlines a long catalogue of investment in infrastructure: arterial transport network; improvement of rail transport; expansion of air transport network; the development of a modern system of postal and telecommunications network; the

rehabilitation of the irrigation system and hydroelectric power are some of the examples. New transportation infrastructure is needed to direct exports to new markets to replace the traditional markets that have been lost and to promote tourism. These investments are bulky and often indivisible. They entail large-scale externalities, making them unattractive to private investors. Kyrgyz Republic foresees future economic growth in manufacturing and services sectors to be led by small and medium enterprises (SMEs). These enterprises are not able to undertake investment in ancillary activities and services that larger private entrepreneurs are often able to finance. Thus the proportion of investment that entails externality would be larger in Kyrgyz Republic than in many other developing countries. Without public sector participation, it is hard to see how these investments would take place.

Two essential macroeconomic preconditions for poverty-alleviating growth

The above propositions lead to two conclusions: (a) Kyrgyz Republic must reverse the declining trend in the rate of investment that has characterized its recent development; and (b) it must reverse the recent trend of a drastic reduction in the share of the public sector in total investment.

The consequence of the recently declining rate of investment has been brought out by the INSPR document itself: the rate of GDP growth will fall from the average of 5.5 per cent over the last six years to just 4 per cent in 2005. As argued above, this rate of GDP growth – after allowance for the net factor income paid abroad, the less than unit elasticity of household income with respect to national income, and the probable increase in inequality as growth spreads to non-agricultural sectors – is unlikely to enable Kyrgyz Republic to reduce poverty.

The argument that the free fall of the share of public sector in investment that has characterized Kyrgyz development in the recent past needs to be reversed must not be confused with a case for a large role of the public sector in production activities. Development experience around the world convincingly demonstrates that the state is not an efficient entrepreneur in production

activities. Orderly privatization of state agricultural and industrial enterprises is highly desirable. But involvement in investment in infrastructure which entails externalities is a necessary responsibility of the state. An abdication of this responsibility prevents the realization of growth potential. The orthodox argument that public investment crowds out private investment, and hence provides no benefit, ignores the demand side of investment which is a serious constraint in Kyrgyz Republic. As has been argued by the critics of the orthodox view, without public investment in infrastructure and other externality-producing activities, there is inadequate incentive to invest, especially on the part of the small entrepreneurs. In this sense, public investment in Kyrgyz Republic will have a “crowding in” effect on private investment.

Financing a higher rate of investment

How will Kyrgyz Republic finance a significantly higher rate of investment? Will an attempt to stimulate the rate of investment endanger its recently attained macroeconomic stability? It is worth noting that macroeconomic stabilization has been attained at the cost of a significant reduction in the rate of investment which, according to the projections of the INSPR, will lead to a significant reduction in the rate of growth. As argued in this report, the fulfillment of the growth target of the INSPR will almost certainly jeopardize the modest poverty reduction that Kyrgyz Republic has achieved in the recent past. It is, however, not a sensible strategy to sacrifice macroeconomic stability in order to increase the rate of investment just as it was not justified to promote stabilization by reducing the rate of investment. So the question that one should ask is what is the rate of investment that can be financed without sacrificing macroeconomic stability? In other words what is the aggregate rate of resource generation by combining domestic savings with the feasible rate of capital inflow?

A good starting point is to look at the INSPR projections which provide a scenario for the period until 2005. Table 10 shows the INSPR figures for 2000 (preliminary estimates) and 2005 (projections). Note that the INSPR does not explicitly state the rate of net capital inflow. It has been derived residually as the difference between the gross investment rate and the gross domestic saving rate

Table 10: Alternative Projections of Investment and Saving
(Per cent of GDP)

| | Preliminary 2000 | INSPR Projection 2005 | Alternative Projection 2005 |
|------------------------|---------------------|--------------------------|--------------------------------|
| Gross investment | 16.0 | 16.0 | 22.3 |
| Public | 8.5 | 3.8 | 10.1 |
| Private | 7.5 | 12.2 | 12.2 |
| Gross domestic savings | 7.5 | 11.5 | 13.8 |
| Public | -2.2 | 2.3 | 2.3 |
| Private | 9.7 | 9.1 | 11.5 |
| Net capital inflow | 8.5 | 4.6 | 8.5 |

There are some remarkably implausible features of the INSPR projections for 2005. Public savings are projected to rise to a modest positive rate. But inexplicably private saving rate is projected to fall! Indeed, the INSPR projects the private saving rate to rise to 10.8 per cent in 2003 and then fall significantly in the following years. It also projects a fairly sharp reduction in the rate of net capital inflow. None of these last two assumptions make much sense. The explanation lies in the remarkable fact that the INSPR reversed the process of making these projections from what they usually are: instead of asking what rate of investment can be financed by resources that the country could mobilize, it asked what should be the rate of domestic saving once a pre-determined investment ceiling and a rate of net capital inflow are agreed upon with the donor community. The sequence of steps in the projections seems to be as follows: (a) the rate of investment is exogenously determined by donor conditionality; (b) the rate of net capital inflow is also a part of agreement with the donors; (c) public saving rate is a part of donor conditionality; and (d) private savings are residually determined. The private saving rate thus determined is below the rate obtained in the recent past, indicating that a part of potential private savings are frustrated because of the investment ceiling.

The authors of this report have made an alternative projection for 2005 which is shown in the last column of Table 10. It reverses the practice adopted by the INSPR by starting from an independent projection of feasible resources and puts investment equal to resources generated. Its resource projection assumptions are as follows. It projects the *rate* of capital inflow to remain the same in 2005 as in the benchmark year. It also assumes that private saving rate will linearly increase between 2003 and 2005 at the same modest rate as the INSPR projects it to rise between the benchmark year and 2003. This enables Kyrgyz Republic to attain a 22.3 per cent rate of investment, something that is more consistent with a rate of GDP growth that would permit a decent rate of poverty reduction.

The alternative projection in Table 10 is a rhetorical projection, not one based on serious and detailed analytical work. Its point is simple. If private savings continue to grow modestly at the rate at which the INSPR projects it to grow between 2000 and 2003 – there is no reason why it should not do so – and if capital inflow remains unchanged at the benchmark rate, then it is possible for Kyrgyz Republic to attain a 40 per cent higher investment rate than is projected by the INSPR. An annual rate of capital inflow of 8.5 per cent of GDP is by no means excessive for a poor country like Kyrgyz Republic. The total amount of net capital inflow would be modest, something of the order of \$120 million in the immediate future. Sustained over several years, this will give Kyrgyz Republic the breathing space to get launched into a path of steadily accelerating growth with substantial poverty reduction. Private saving is as much a matter of inducement to invest as the capacity to save. Saving rates achieved in the recent past suggest that if inducement to invest is adequate the alternative projection will be well within the grasp of Kyrgyz Republic.

Can one go beyond the rhetorical alternative presented in Table 10? The authors of this report have reasons to believe that the target rate of investment in 2005 can be higher than the figure shown in the alternative projection in Table 10. This belief is based on the perusal of recent domestic savings estimates. Domestic saving rates in Kyrgyz Republic, as estimated by the NSC, have been extremely volatile. It needs to be analyzed if this volatility is largely a statistical quirk or due to real volatility in economic circumstances. It however appears that the rate of domestic savings in recent

years – 2000 and 2001 – has been much higher and more stable than it was thought to be. According to revised NSC estimate the rate of domestic saving in 2000 was 14.4 per cent of GDP, far higher than assumed in the INSPR projections. Preliminary estimate for 2001 puts the saving rate at even higher a level. If these figures are right, it should easily be feasible for Kyrgyz Republic to attain a 15 to 16 per cent rate of domestic saving by 2005 under the growth scenario proposed in this report. This would make it possible for the country to attain a 24 per cent or slightly higher rate of investment.

The main point that this report makes is that a predetermined ceiling on the rate of investment is not the way to go for a desperately poor country hoping to quickly overcome its poverty and backwardness. It should generate as much of domestic savings as is feasible by setting up right incentives to save and invest. The international community should join forces with this national effort by continuing a rate of capital inflow that is no lower than what it was in the benchmark year

Incentive to invest

The INSPR projects the private investment rate to rise to 12.2 per cent and the public investment rate to fall to a meager 3.8 per cent by 2005. As this report has argued, the rate of public investment can not decline so drastically without jeopardizing badly-needed investment in infrastructure and other externality-providing sectors. In the alternative projections of Table 10, private investment rate is kept at the same rate as postulated in the INSPR and the increase in the investment rate, over the INSPR projection, is allocated to public investment. Two points need to be noted. First, the public investment rate in the alternative projection is lower than the actual public investment rate in 1999. Secondly, it includes all large-scale public collaboration with foreign direct investment. Budgetary practice in Kyrgyz Republic seems to include FDI with private investment. Thus the difference between the alternative projection and the official projection of the share of public investment is less extreme than appears from Table 10.

The feasibility of the projected private investment will depend on the adequacy of the inducement to invest. For the small entrepreneur inducement to invest is also an inducement to save which often takes the form of direct capital construction and mobilization of resources from informal sources. Kyrgyz Republic needs to set up a broad-based system of incentive to invest and promotion of worthwhile industries. While its principal focus should be the small and medium enterprises, it should also aim at larger industries which might attract FDI. The decline of Kyrgyz industries has been caused by the loss of the system of incentives under Soviet central planning which, though distorted, was a powerful guarantee for survival under all uncertainties. So far, the principal achievement of economic reform has been the abolition of that distorted system of incentives. It is yet to set up an alternative system of incentives that would induce investors to overcome the “generalized infancy” that industries are afflicted with in landlocked Kyrgyz Republic inheriting a poor infrastructure and suffering from inadequate skills, lack of training in business practices and lack of contact with potential markets. To reverse the on-going industrial decline, Kyrgyz Republic needs to offset these disadvantages by a broad and strong set of measures for industrial promotion. Devising such a system of incentives is a major undertaking. The present report can only indicate some of its necessary elements.

One of the most important elements of a strategy for the promotion of private investment is public investment in infrastructure: roads, railways, airports, transport services, communications. There should be carefully targeted investment in the development of skills, business management and the facilitation of access to information. Given that much of future industrial development is planned under SME, there needs to be special assistance in market access through the dissemination of information and facilitation of links with international marketing networks. There is an overriding need to facilitate access to credit, including credit for small and micro-entrepreneurs. Access to critical inputs at competitive prices must be assured. These are difficult tasks which require the creation of new institutions and organizations. This should be the principal focus of development policy in the immediate future.

A related need is the creation of new trading links to replace the ones that were eliminated by the demise of the Soviet Union. The issue of the emerging pattern of comparative advantage for

exports is closely linked with the identification of new markets. To a certain extent new destinations for exports can be found within the existing infrastructure. Some of it has taken place naturally, in response to the change in incentives. Examples of this are the increased export of wool and livestock products to China. Ultimately the diversification of sources and destinations for trade will require the creation of new infrastructure: transport, port and communications facilities. This will require careful planning and long-term donor assistance of substantial proportions within the framework of regional cooperation.

Promotions of the above kind should create adequate inducement to invest once they are fully in place. But these measures take a long time to reach a critical minimum level. In the meantime public policy in Kyrgyz Republic must use more direct support to promote worthwhile industries by offsetting the factors causing their infancy. The traditional method for such support is protection which has its own adverse effects, especially if it is indiscriminately resorted to. This report by no means recommends a return to the mindlessly inefficient arbitrary protection, under the import-substituting industrialization regime, that characterized the development of the third world until recently. An alternative is the kind of carefully designed export promotion that the East Asian countries adopted by channeling subsidized credit to successful export performers. The success of this alternative presupposes the autonomy and independence of public administration, banks and financial institutions that by themselves constitute a precondition for industrial inducement. If such schemes are not immediately feasible, Kyrgyz Republic needs to think about a limited, time-bound system of tariffs to promote specifically-targeted industries. This kind of limited, time-bound protection is well within the limits imposed by the WTO and is widely practiced by the developing countries. While the details of the terms of Kyrgyz Republic's accession to the WTO are not known to the authors of this paper, it would be most unusual for these to become an obstacle to such measures.

Investment incentive in Kyrgyz Republic is also dependent on expanded economic cooperation with the immediate neighbours. Freer trade with the neighbours would expand the size of the market for Kyrgyz products both by increasing sales to them and by more efficient transit to other markets. Also, it would be easier for the region to attract FDI once it forms itself into one

market. Within that expanded market Kyrgyz Republic will find it easier to attract FDI in industries in which it has comparative advantage.

Elements of an Income-Distribution Strategy

As noted earlier in this report, disequalizing tendencies are likely to become stronger both in agriculture and in the non-agricultural sectors as economic growth continues and spreads outside agriculture. Without careful action to contain these forces, the effect of growth on poverty reduction would be blunted and, in the extreme case, completely or more than completely offset. Here some of the principal elements of a strategy to contain the forces of inequality are highlighted.

Improving the system of poverty monitoring

To perform this task well, Kyrgyz Republic needs to improve its system of poverty monitoring. There is already an annual Household Budget Survey in place. To its credit, the NSC has been processing the NBS data without too long a lag. There are, however, ways of improving the system of measuring and monitoring poverty. The poverty thresholds need careful differentiation based on regional and locational differences in cost of living. The results of the survey require deep and careful analysis to determine the vulnerability of different social groups and the changing pattern of their vulnerability. Monitoring of the non-income aspects of poverty should be institutionalized and integrated with the HBS. Current data on access of different income groups to health and education suffer from serious inadequacies.

Maintaining the equality of land ownership and the distribution of rural income

The recent legalization of private land sales has broadened both opportunities and risks. Opportunities have been expanded by making it possible for peasants to use land as collateral. Risks have been created by increasing the probability on the part of the poor and weak peasants to lose land to the more efficient farmers. Indeed, the authors' discussions with the officials of the Ministry of Agriculture left a clear impression that a widespread perception among the latter is that the principal

purpose of the legalization of land sales is the promotion of a more efficient allocation of land by weeding out the weak and inefficient peasants and increasing the land endowment of the efficient farmers. Reports of land sales following its legalization indicates that a good deal of distress sale has been going on.¹⁸

To prevent such a process of polarization, rural development strategy should focus on improving the productivity of the small and poor peasants. The outstanding priorities for public policy for an improvement of the productivity in agriculture, especially of the small peasants, include the following:

It has been noted above that the decline in agriculture was associated with a serious disruption in the supply of inputs and services. To assure the availability of inputs and services at right prices it is also important to create efficient trade and distribution networks characterized by a high degree of competition among traders, low cost of transportation and easy access to information. Currently a number of such programmes are in operation (The World Bank ASSP project is an example) and there is a vast scope for their further expansion.

In the past research in seed development was geared to serve the pattern of specialization promoted by the Soviet regime. The seed industry is in disarray. A more important issue is that the change in incentives, brought about by the integration of Kyrgyz Republic with the global economy, warrants a change in the composition of cropping with possible diversification into completely new crops. To bring about a desirable pattern of diversification, forward linkage in the form of the supply of the right kind of seeds needs to be created.

As demonstrated above, agriculture in Kyrgyz Republic has experienced a sharp deterioration in terms of trade. This has not only reduced the incentive for investment in agriculture, but also has driven a wedge between the growth of output and income in the rural areas thereby slowing down the reduction of rural poverty. At this time not enough is known about the sources of deteriorating

¹⁸ *Bishkek Observer* of July 16, 2002 reports the sale of 870 hectares recorded with land registration authority. The average price of land, almost all of which was farm land, was only 6,200 Soms per hectare or just \$ 129. This

terms of trade. Careful studies are needed to ascertain to what extent the deterioration in agriculture's terms of trade have been due to biased policies (distortions created by taxes, subsidies, pricing and distribution policies) and physical bottlenecks (disruption of marketing channels and lack of appropriate investments to restore and/or recreate them). Policy reforms indicated by these studies should be implemented as quickly as possible.

There is an urgent and widespread need for training in peasant-farm management. Small peasant households have little experience of managing individual farms. They need broad training in both agricultural and accounting practices, specifically designed for peasant farmers.

There is a need for divisible technology suitable for small farms. Available technology for land preparation and harvesting is designed for Soviet-type farming and is too large for pretty much any kind of farming system. There is a need to determine the right kind of technology for the peasant farmers and to facilitate access to it.

There is an overwhelming need to facilitate access to credit. Peasant farmers seldom received significant non-land assets from the former collectives. Access to credit at a reasonable cost is essential for them to have access to current inputs and capital services which have to be purchased from outside.

Family parcels of land are typically very small. The rural economy supports a disproportionately high percentage of population. In recent years this percentage has increased. For rural income to be high enough to permit a rapid reduction of poverty, it is essential for the peasant households to diversify into non-farm activities. Thus support for peasant farmers needs to be expanded to promote non-farm enterprises in rural areas. Comprehensive support for the promotion of rural non-farm activities includes credit, technology, product design, training and access to market. A balanced and egalitarian development of agriculture often induces growth of non-agricultural activities by creating demand for both inputs and consumption goods of the kind for which expertise already exists or is easy to create within the rural economy.

indicates the strong possibility of substantial distress sale.

Non-agricultural sectors

The principal instrument for the containment of disequalizing forces in the non-agricultural sector is the promotion of SME, including micro-enterprises, and the removal of impediments to competition by the promotion of access to credit, skill, market and technology. Some of the other elements of support needed to promote SME have been outlined earlier.

Inevitably, large-scale enterprises will develop in many sectors, especially as a vehicle for the inflow of FDI. For the poverty-reduction impact of growth of these sectors to be substantial, it is essential to make them sufficiently labour absorbing. To make this possible, the system of incentives, especially the relative factor prices, must be free of undesirable distortions. Employment intensity of industrialization and tertiary growth can be enhanced by shifting both the supply of and the demand for labour to the right. On the supply side, a flexible functioning of the labour market needs to be promoted. Improvement in labour productivity, brought about by the dissemination of training and skills, should help shift the demand for labour to the right.

Direct interventions to improve the welfare of the poor

At the moment Kyrgyz Republic's social protection system has a universal monthly benefit (UMB) paid to all poor households. The eligibility condition is that the per capita income of the household must be less than 140 Som. The payment is the difference between the actual income and the threshold income. The limitations of the system are numerous. First, the threshold is just 22 per cent of the poverty line in 2001. Thus UMB provides little protection from poverty. Secondly, the cost of targeting must be very substantial. One of the characteristics of poverty in Kyrgyz Republic is its volatility. It must be difficult and expensive to keep track of the eligibility status of the members of the society. Leakages are inevitable and almost certainly substantial. HBS data show that UMB payments indeed benefit the poor more than the non-poor: the poorest rural quintile of

households receive 2.5 per cent of their income from this source, far higher a proportion of income than for the other rural and urban groups. But there is evidence of substantial leakage in so far as all rural quintile groups and the lowest three urban quintile groups receive benefits from this source.

Currently the system of direct transfers also includes benefits for the disabled, single mothers with ten or more children, and orphans. There are also energy and utility subsidy for 36 different specific categories of people. It is impossible to determine the effect of these programmes on the welfare of the poor. It is, however, unlikely to be anything but negligible.

Kyrgyz Republic also has unemployment benefits and pensions for retirees. Entitlements for these have become very small. They do not provide meaningful protection from poverty. The pension system is badly in need of reform: retirement age thresholds, inherited from the Soviet era, are unrealistic. Benefits have reached absurdly low values in real terms. Also the evidence based on the detailed analysis of the HBS data suggests that the presence of pensioners in a household actually reduces the risk of falling into poverty.¹⁹ No doubt pensions and unemployment benefits are in need of urgent overhaul; but that should be the subject of a major independent study. This report can not deal with these issues and it is hard to see how a poor country like Kyrgyz Republic can design formal insurance schemes for the unemployed and the pensioners following the model of the advanced industrial countries as effective instruments for poverty reduction.

¹⁹ This may be because the pensioners are people with skills who continue to work and are able to benefit from past contact with institutions and individuals.

There is a lot to be said for designing direct intervention for the protection of the poor in the form of public works programmes (with targeted income subsidy, combined with community support, for those - the disabled, the old and the children - who are unable to benefit from employment in such programmes). Self-targeted programmes like public works have an inherent advantage in reducing leakage of benefits to the non-poor when targeting is made difficult, as in Kyrgyz Republic, by the volatility of poverty, the difficulty of ascertaining household characteristics and the inevitability of corruption in administering targeted benefits. Public works programmes can also be far less costly than income transfer as an instrument for social protection in so far as they can be effective instruments for capital construction. A good part of the investment in infrastructure could be implemented by public works programmes, thereby directly augmenting the income and welfare of the poor. Employment in public works is a far better alternative to unemployment benefit. Given the low retirement age, it can often be a better alternative to pension. Public works programme should be seen as a long-term instrument for capital construction and poverty reduction, not a temporary welfare measure. The system should be carefully worked out and made an integral part of the strategy for growth for poverty reduction.

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REFERENCES

Asian Development Bank, 2001. *Asian Development Outlook 2001*, Oxford University Press, Oxford, New York.

Babu, Suresh and Alisher Tashmatov, 2000. *Food Policy Reforms in Central Asia: Setting the Research Priorities*, International Food Policy Research Institute, Washington, D.C.

Economist Intelligence Unit, Country Profiles Kyrgyz Republic and Tajikistan, EIU Website at

www.eiu.com.

Khan, A. R. and D. P. Ghai, 1979. *Collective Agriculture and Rural Development in Soviet Central Asia*, Macmillan, London.

Kudabaev, Zarylbeck and Shamsiya Ibragimova, 2001. *Economic Growth and Poverty in the Kyrgyz Republic*, National Statistical Committee, Bishkek (manuscript).

Law and Business, 2001. *Law and Business*, No. 2, April, a journal sponsored by the USAID LIME Project (ARD/Checchi), Bishkek.

Milanovic, Branko, 1998. *Income, Inequality, and Poverty during the Transition to a Market Economy*, World Bank, Washington, D.C.

UNDP, 1993. *Human Development Report 1993*, Oxford University Press, New York.

UNDP, 1994. *Human Development Report 1994*, Oxford University Press, New York.

UNDP, 1999. UNDP Regional Bureau for Europe and CIS, *Central Asia 2010, Prospects for Human Development*.

UNDP, 2001. *Human Development Report 2001*, Oxford University Press, New York.

World Bank, 1998. *Consultation with the Poor*.

World Bank, 1999. *Kyrgyz Republic: Update on Poverty in the Kyrgyz Republic*, June.

World Bank, 2000a. *Kyrgyz Republic: Agriculture and Agribusiness: growth Opportunities and Obstacles*, June 30.

World Bank, 2000b. *Making Transition Work for Everyone: Poverty and Inequality in Europe and Central Asia*, Washington, D.C.

World Bank 2001a. *World Development Indicators 2001 (CD ROM)*, Washington, D.C.

World Bank, 2001b. *Kyrgyz Republic: Poverty in the 1990s in the Kyrgyz Republic*, Washington, D.C.

World Bank, 2002. *World Development Indicators*, Washington, D.C.
